

Knoxville

JUL 01 2013

STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF AIR POLLUTION CONTROL



532-0554

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401 Church Street
Nashville, TN 37243-1531
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NOT TO BE USED FOR TITLE V APPLICATIONS

PERMIT APPLICATION

APC 20

PLEASE TYPE OR PRINT AND SUBMIT IN DUPLICATE FOR EACH EMISSION SOURCE. ATTACH APPROPRIATE SOURCE DESCRIPTION FORMS.

1. ORGANIZATION'S LEGAL NAME New Cingular Wireless PCS, LLC dba AT&T Mobility			/// FOR	APC COMPANY--POINT NO. 73-0240-01
2. MAILING ADDRESS (ST/RD/P.O. BOX) 2600 Camino Ramon, Room 3E450Z			/// APC	APC LOG/PERMIT NO. 967410
CITY San Ramon	STATE CA	ZIP CODE 94583	PHONE WITH AREA CODE (925) 327-2532	
3. PRINCIPAL TECHNICAL CONTACT Barbara Walden, EH&S Manager			PHONE WITH AREA CODE (925) 327-2532	
4. SITE ADDRESS (ST/RD/HWY) 183 Raby Hollow Road			COUNTY NAME Roane	
CITY OR DISTANCE TO NEAREST TOWN Kingston		ZIP CODE 37763	PHONE WITH AREA CODE	
5. EMISSION SOURCE NO. (NUMBER WHICH UNIQUELY IDENTIFIES THIS SOURCE) GEN I		PERMIT RENEWAL YES () NO (X)		
6. BRIEF DESCRIPTION OF EMISSION SOURCE				

50 kW diesel-fired emergency generator (design rating) equipped with an engine rated at 70 kW (93 hp).

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7. TYPE OF PERMIT REQUESTED				
CONSTRUCTION (X)	STARTING DATE October 2013	COMPLETION DATE October 2013	LAST PERMIT NUMBER	EMISSION SOURCE REFERENCE NUMBER GEN I
OPERATING ()	DATE CONSTRUCTION STARTED	DATE COMPLETED	LAST PERMIT NUMBER	EMISSION SOURCE REFERENCE NUMBER
LOCATION TRANSFER ()	TRANSFER DATE		LAST PERMIT NUMBER	EMISSION SOURCE REFERENCE NUMBER

ADDRESS OF LAST LOCATION

8. DESCRIBE CHANGES THAT HAVE BEEN MADE TO THIS EQUIPMENT OR OPERATION SINCE THE LAST CONSTRUCTION OR OPERATING PERMIT APPLICATION.

N/A

9. SIGNATURE (APPLICATION MUST BE SIGNED BEFORE IT WILL BE PROCESSED) <i>Michele M. Blazek</i>		DATE 6/5/2013
10. SIGNER'S NAME (TYPE OR PRINT) Michele M. Blazek	TITLE Assistant Secretary	PHONE WITH AREA CODE 925-327-2532



NOT TO BE USED FOR TITLE V APPLICATIONS

PROCESS OR FUEL BURNING SOURCE DESCRIPTION

APC21(& 24)

PLEASE TYPE OR PRINT, SUBMIT IN DUPLICATE AND ATTACH TO THE PERMIT APPLICATION.

1. ORGANIZATION NAME New Cingular Wireless PCS, LLC dba AT&T Mobility		/// FOR	APC COMPANY-POINT NO.	
2. EMISSION SOURCE NO. (AS ON PERMIT APPLICATION) GEN 1		SIC CODE 4812	/// APC	APC PERMIT/LOG NO.
3. DESCRIPTION OF PROCESS OR FUEL BURNING UNIT Emergency use generator, GENERAC 5564-0 (SD-050). Engine manufactured after April 1, 2006. Rated at 50 kW; maximum engine output of 70 kW. Limited to 500 operating hours per year.				
4. NORMAL OPERATION: → Limited to 500 hours/year	HOURS/DAY N/A	DAYS/WEEK N/A	WEEKS/YEAR N/A	DAYS/YEAR N/A
5. PERCENT ANNUAL THROUGHPUT: →	DEC.-FEB. N/A	MARCH-MAY N/A	JUNE-AUG. N/A	SEPT.-NOV. N/A
6. TYPE OF PERMIT APPLICATION				(CHECK BELOW ONE ONLY)
PROCESS SOURCE: APPLY FOR A SEPARATE PERMIT FOR EACH SOURCE. (CHECK AT RIGHT, AND COMPLETE LINES 7, 8, 13, AND 14).				()
PROCESS SOURCE WITH IN-PROCESS FUEL: PRODUCTS OF COMBUSTION CONTACT MATERIALS HEATED. APPLY FOR A SEPARATE PERMIT FOR EACH SOURCE. (CHECK AT RIGHT, AND COMPLETE LINES 7, 8, AND 10 THROUGH 14)				()
NON-PROCESS FUEL BURNING SOURCE: PRODUCTS OF COMBUSTION DO NOT CONTACT MATERIALS HEATED. COMPLETE THIS FORM FOR EACH BOILER OR FUEL BURNER AND COMPLETE AN EMISSION POINT DESCRIPTION FORM (APC 22) FOR EACH STACK. (CHECK AT RIGHT, AND COMPLETE LINES 9 TO 14)				(X)
7. TYPE OF OPERATION: CONTINUOUS, ()		BATCH ()	NORMAL BATCH TIME	NORMAL BATCHES/DAY
8. PROCESS MATERIAL INPUTS AND IN-PROCESS SOLID FUELS	DIAGRAM* REFERENCE	INPUT RATES (POUNDS/HOUR)		/ / (FOR APC USE ONLY) SCC CODE
		DESIGN	ACTUAL	
A.				/ /
B.				/ /
C.				/ /
D.				/ /
E.				/ /
F.				/ /
G.				/ /
TOTALS				/ /

* A SIMPLE PROCESS FLOW DIAGRAM MUST BE ATTACHED.

(OVER)

9. BOILER OR BURNER DATA: (COMPLETE LINES 9 TO 14 USING A SEPARATE FORM FOR EACH BOILER)					
BOILER NUMBER	STACK NUMBER**	TYPE OF FIRING***	RATED BOILER HORSEPOWER	RATED INPUT CAPACITY (10 ⁶ BTU/HR)	OTHER BOILER RATING (SPECIFY CAPACITY AND UNITS)
GEN 1	GEN 1	Internal Combustion Engine	93 (engine)	0.57 (engine)	70 kW (engine); 50 kW (generator)
BOILER SERIAL NO.		DATE CONSTRUCTED	DATE OF LAST MODIFICATION (EXPLAIN IN COMMENTS BELOW).		
N/A		N/A			

** BOILERS WITH A COMMON STACK WILL HAVE THE SAME STACK NUMBER.

*** CYCLONE, SPREADER (WITH OR WITHOUT REINJECTION), PULVERIZED (WET OR DRY BOTTOM, WITH OR WITHOUT REINJECTION), OTHER STOKER (SPECIFY TYPE), HAND FIRED, AUTOMATIC, OR OTHER TYPE (DESCRIBE BELOW IN COMMENTS).

10. FUEL DATA: (COMPLETE FOR A PROCESS SOURCE WITH IN-PROCESS FUEL OR A NON-PROCESS FUEL BURNING SOURCE)				STANDBY FUEL TYPE(S) (SPECIFY)			
PRIMARY FUEL TYPE (SPECIFY)				N/A			
Diesel Fuel Oil #2							
FUELS USED	ANNUAL USAGE	HOURLY USAGE		% SULFUR	% ASH	BTU VALUE OF FUEL	(FOR APC ONLY) SCC CODE
		DESIGN	AVERAGE				
NATURAL GAS:	10 ⁶ CUFT	CUFT	CUFT	/ / / / / / / /	/ / / / / /		
#2 FUEL OIL: Primary	10 ³ GAL 2.08	GAL 4.15	GAL 4.15	0.0015	/ / / / / /	137,000 Btu/gal	
#5 FUEL OIL:	10 ³ GAL	GAL	GAL		/ / / / / /		
#6 FUEL OIL:	10 ³ GAL	GAL	GAL		/ / / / / /		
COAL:	TONS	LBS	LBS				
WOOD:	TONS	LBS	LBS	/ / / / / / / /	/ / / / / /		
LIQUID PROPANE:	10 ³ GAL	GAL	GAL	/ / / / / / / /	/ / / / / /		
OTHER (SPECIFY TYPE & UNITS.):							

11. IF WOOD IS USED AS A FUEL, SPECIFY TYPES AND ESTIMATE PERCENT BY WEIGHT OF BARK


N/A

12. IF WOOD IS USED WITH OTHER FUELS, SPECIFY PERCENT BY WEIGHT OF WOOD CHARGED TO THE BURNER.

N/A

13. COMMENTS

Source is limited to 500 operating hours per year and will operate as an emergency engine.

14. SIGNATURE 	DATE 6/5/2013
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NOT TO BE USED FOR TITLE V APPLICATIONS

EMISSION POINT DESCRIPTION

APC 22

PLEASE TYPE OR PRINT AND SUBMIT IN DUPLICATE FOR EACH STACK OR EMISSION POINT.
ATTACH TO THE PERMIT APPLICATION.

1. ORGANIZATION NAME New Cingular Wireless PCS, LLC dba AT&T Mobility				///	APC COMPANY POINT NO		
2. EMISSION SOURCE NO. (FROM APPLICATION) GEN 1				FOR	APC SEQUENCE NO		
3. LOCATION:				APC			
→	LATITUDE 35°45'39.21"	LONGITUDE -84°37'15.77"	UTM VERTICAL	UTM HORIZONTAL			
4. BRIEF EMISSION POINT DESCRIPTION (ATTACH A SKETCH IF APPROPRIATE): Emergency use diesel generator designed for 50 kW, maximum engine output of 70 kW (93 hp).					DISTANCE TO NEAREST PROPERTY LINE (FT)		
COMPLETE LINES 5 AND 6 IF DIFFERENT FROM THAT ON THE PROCESS OR FUEL BURNING SOURCE DESCRIPTION (APC 21)							
5. NORMAL OPERATION: 500 hours / year →	HOURS/DAY ←	DAYS/WEEK ←	WEEK/YEAR ←	DAYS/YEAR ←			
6. PERCENT ANNUAL THROUGHPUT: →	DEC.-FEB	MARCH-MAY	JUNE-AUG.	SEPT.-NOV.			
7. STACK OR EMISSION POINT DATA: →	HEIGHT ABOVE GRADE (FT) 7	DIAMETER (FT) 0.25	TEMPERATURE (°F) 930	% OF TIME OVER 125°F 100	DIRECTION OF EXIT (UP, DOWN OR HORIZONTAL)		
DATA AT EXIT CONDITIONS: →	FLOW (ACTUAL FT ³ /MIN.) 534	VELOCITY (FT/SEC) 181.3	MOISTURE (GRAINS/FT ³)		MOISTURE (PERCENT)		
DATA AT STANDARD CONDITIONS: →	FLOW (DRY STD. FT ³ /MIN) →	VELOCITY (FT/SEC)	MOISTURE (GRAINS/FT ³)		MOISTURE (PERCENT)		
8. AIR CONTAMINANTS	ACTUAL EMISSIONS				EMISSIONS* EST. METHOD	CONTROL DEVICES*	CONTROL EFFICIENCY%
	EMISSIONS (LBS/HR) AVERAGE	MAXIMUM	CONCENTRATION	AVG. (TONS/YR)			
PARTICULATES	0.06	0.06	8.82 E-04 lb/kW-hr	0.02	5 (Tier 3)	None	N/A
SULFUR DIOXIDE	1.13E-03	1.13E-03	1.21 E-05 lb/hp-hr	2.82E-04	3	None	N/A
CARBON MONOXIDE	0.77	0.77	1.10 E-02 lb/kW-hr	0.19	5 (Tier 3)	None	N/A
ORGANIC COMPOUNDS	0.02	0.02	2.65 E-04 lb/kW-hr	4.63E-03	5 (Vendor)	None	N/A
NITROGEN OXIDES	0.73	0.73	1.04 E-02 lb/kW-hr	0.18	5 (Tier 3)	None	N/A
FLUORIDES							
OTHER(SPECIFY) GHG as CO ₂ e	126	126	1.80 lb/kW-hr	31.48	5 (Vendor)	None	N/A
OTHER(SPECIFY) Single HAP	7.68E-04	7.68E-04	8.26 E-06 lb/hp-hr	1.92 E-04	3	None	N/A
OTHER(SPECIFY) Total HAPs	2.47E-03	2.47E-03	2.65 E-05 lb/hp-hr	6.17 E-04	3	None	N/A

(OVER)

9. CHECK TYPES OF MONITORING AND RECORDING INSTRUMENTS THAT ARE ATTACHED:OPACITY MONITOR (), SO₂ MONITOR (), NO_x MONITOR (), OTHER (SPECIFY IN COMMENTS) ()

10. COMMENTS

Emissions calculated based on the generator operating at full capacity for 500 hours per year, maximum engine rating, and Tier 3 emission factors for CO, NO_x, and PM. Vendor factors used for VOC and GHG. AP-42 factor from Section 3.4 used for SO₂ along with 15 ppm S content.

11. SIGNATURE

DATE

6/5/2013

* REFER TO THE BACK OF THE PERMIT APPLICATION FORM FOR ESTIMATION METHOD AND CONTROL DEVICE CODES

** EXIT GAS PARTICULATE CONCENTRATION UNITS: PROCESS — GRAINS/DRY STANDARD FT³ (70°F); WOOD FIRED BOILERS — GRAINS/DRY STANDARD FT³ (70°F); ALL OTHER BOILERS — LBS/MILLION BTU HEAT INPUT.

*** EXIT GAS SULFUR DIOXIDE CONCENTRATIONS UNITS: PROCESS — PPM BY VOLUME, DRY BASES; BOILERS — LBS/MILLION BTU HEAT INPUT.

183 Raby Hollow Road, Kingston (Roane County)